

Claims

1. A method of handling objects,
5 wherein at least one arm of a handling system for the handling of at least one object is moved in space relative to a reference system, in particular a fixed reference system, characterized in that the locations of the arm are determined by a locating method with
10 reference to the reference system fixed by the associated locating system.
2. A method in accordance with claim 1, characterized in that at least one physical field, in particular an acoustic, optical and/or
15 electromagnetic field, can be set up for the location of the arm.
3. A method in accordance with claim 1 or claim 2, characterized in that a unidirectional locating system, in particular in the manner of the so-called global positioning system, GPS, is used for the locating
20 of the arm.
4. A method in accordance with any one of the preceding claims, characterized in that a robot arm is used as the arm.
- 25 5. A method in accordance with any one of the preceding claims, characterized in that a gripping arm of a robot which takes up and/or moves the object is used as the arm.

6. A method in accordance with any one of the preceding claims, characterized in that an exchangeable tool or a tool fixedly provided at the arm is handled as the object in the space.
- 5 7. A method in accordance with claim 6, characterized in that the relative orientation of the tool to the arm is determined, in particular independently of the locating system.
8. A method in accordance with claim 6 or claim 7, characterized in
10 that the tool is supplied with energy in a wireless manner, in particular inductively or by means of an accumulator.
9. A method in accordance with any one of the claims 6 to 8, characterized in that control data of the tool are transmitted in a
15 wireless manner, in particular inductively or by radio.
10. A method in accordance with any one of the preceding claims, characterized in that the locating system is calibrated by self-calibration.
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11. An apparatus for the handling of objects comprising at least one arm for the handling of at least one object; and means for determining the location of the arm relative to a reference system, in particular a fixed reference system,
25 characterized in that a locating system is provided for the determination of the location of the arm with reference to the reference system fixed by the locating system.

12. An apparatus in accordance with claim 11, characterized in that the locating system has at least one means for the setting up of a physical field, in particular of an acoustic, optical and/or electromagnetic field.
13. An apparatus in accordance with claim 11 or claim 12, characterized in that the locating system is made as a unidirectional locating system, in particular in the manner of the so-called global positioning system, GPS.
14. An apparatus in accordance with any one of the claims 11 to 13, characterized in that the arm is made as a robot arm.
15. An apparatus in accordance with claim 14, characterized in that the robot arm has a gripping element with which the object can be taken up and/or moved.
16. An apparatus in accordance with any one of the claims 11 to 15, characterized in that the object is an exchangeable tool or a tool fixedly provided at the arm.
17. A method in accordance with claim 16, characterized in that means, in particular means independent of the locating system for the determination of the relative orientation of the tool to the arm, are provided at or in the arm and/or at or in the tool.

18. An apparatus in accordance with any one of the claims 11 to 17, characterized in that means are provided for the wireless energy supply of the tool, in particular means for the inductive energy supply or an accumulator.

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19. An apparatus in accordance with any one of the claims 11 to 18, characterized in that means are provided for the wireless transmission of control data of the tool, in particular means for inductive transmission or for transmission by radio.

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20. An apparatus in accordance with any one of the claims 11 to 19, characterized in that means are provided for the self-calibration of the locating system.